

COST and MANAGEMENT

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COST AND MANAGEMENT

The Instalment Plan from the Economic and Social Point of View

By DR. HENRY LAUREYS

Dean of the School of Higher Commercial Studies, Montreal

(Before Montreal Chapter, October 11, 1928.)

ALTHOUGH your Society is in the habit of discussing problems of accountancy, I have thought it interesting to draw your attention to another sort of business problems: credit, one form of which has developed immensely during the last few years and may, as many economists think, become a danger to the welfare of our community if not placed on a proper basis. I have in mind that special form of "consumer's credit," commonly designated under the name of system of deferred payment or instalment plan.

I will not attempt to define or analyze a practice with whose principles and application you are as familiar as myself. All I will say is that we find ourselves faced by a problem of such size and weight as can only be appreciated with difficulty.

We discuss it in principle, we realize its irresistible propagation amongst us, and we notice that some await its final outcome with optimism, others with fear. Opinions are divided on the value of this new commercial procedure, and on the results which are sure to follow from it.

Even specialists in credit problems are not in agreement on the subject I propose to set before you, not so much in itself as in its consequences. As an example, I need only refer to the discussion which took place last year (1927) at the convention in Edmonton of the "Canadian Credit Men's Trust Association," when diametrically opposed views were put forward.

I do not hesitate to place myself wholly on the side of those to whom the rapid diffusion of the deferred payment system under the form of the instalment plan causes apprehensions.

And I ask you to notice that I place myself for the purpose of judging the merits of this method of selling on a level more elevated than the immediate interest of a type or a group of business men, or of any sort of industrial or

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commercial concern. It is from the point of view of the general economic welfare of society that I tackle this problem.

Now from this point of view, the examination of the fundamental principles of the instalment plan and, on the other hand, of the various business transactions in connection with which it is most extensively practised justify, I believe, certain misgivings—the more so, because many people only see an advantage and a promise of progress where dwells perhaps the most certain danger.

Spending Future Revenue

What, indeed, is this deferred payment scheme if not an engagement by an individual on his future revenue—something which he does not actually possess and which he thus disposes of without the certainty that he ever will possess it?

From another standpoint, credit is an act of confidence conditioned by various elements. But here it appears that confidence assumes an aspect of rashness—not altogether, paradoxical as it seems, on the part of the business man who has protected his immediate interests, but more so on the part of the client, who is supposed to benefit by the transaction, and of society which tolerates such a practice beyond reasonable limits and even to abuse.

While naturally the merchant takes all the steps that prudence and the desire for profit suggest to protect the advances he makes and the profits he expects, the client meantime fascinated by the apparent facility of his engagements, abandons himself to the future with closed eyes, having no better knowledge than ordinary mortals as to what to-morrow may bring forth.

We may then reasonably fear that in this way the instalment plan puts within the reach of the general public, that is to say of a crowd which neither reasons nor foresees, a system which some day will have on the economic structure of business life as a whole a double repercussion. First, a repercussion of the social order by the shattering of the spirit of prudence and of the sense of economy. Secondly, a repercussion of the economic order, compromising the stability of business. The first opens the door to the second, and each enlarges the influence of the other.

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Speaking in September, 1926, before the National Business Conference, the American economist and specialist in crisis problems, Roger W. Babson, delivered the following warning:—"While most things point to several years of prosperity, a distinct recession in business and possibly a panic within the next two or three years would not be surprising. Such decline would be merely temporary, but when it comes it will be the result of the overextension of the instalment business which to-day is eating into the vitals of business like a cancer. . . . We are in a period of prosperity and years of prosperity ahead of us, but most American people are living in a fool's paradise and may be rudely awakened at any time."

"The first reproach that we must make against the deferred payment system," writes recently Mr. R. Claoué in the "Revue Economique Internationale," "is that it all too frequently impels the employment of savings in a wrong direction, resulting in losses and a slackening of the spirit of enterprise—in a word, a real crisis, a period of depression."

A wrong direction in the employment of savings? Here we touch the root of the evil.

A Wide-spread Practice

The instalment plan has in fact developed into a complete system with rules and special organs in certain branches of commerce. An enquiry directed by Mr. Milan V. Ayres on behalf of the American Bankers' Association has revealed that in the U.S.A. about 15 per cent. of all retail sales to-day are made in this way, and that at the end of 1925 the sum total of such credits oscillated around 2,750 millions of dollars.

It is true that Mr. Edwin R. S. Seligman, professor of political economy at Columbia University, after an enquiry made on behalf of the automobile industry reduced this percentage to about 12%. The proportion, however, is still high and the sum total, very impressive, has increased in the course of the past two years.

Moreover, the instalment plan has above all extended itself to the sale of luxuries: musical instruments, pianos, radios, phonographs, furs, jewellery, and especially automobiles, which alone contribute 54 per cent. of the \$2,750,000,000 above mentioned.

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What is more, it has been calculated that 65 per cent. of automobiles are sold for purposes of amusement or luxury, and that 90 per cent. of cars sold for such purposes are bought on the instalment plan. On the contrary, 80 per cent. of the motor cars sold for business purposes and used in productive enterprise are paid for in cash. Why? I do not need to give you business men an answer to this question. But, the essential difference of procedure between the two groups just mentioned denotes a state of mind that invites useful reflection.

Moreover, more detailed figures, which I borrow from an article by Mr. Francis Rodd in the "Economic Journal" of June, 1926, state that there were sold in 1925 in the United States 4,300,000 automobiles (touring and pleasure) at an average price of \$1,000 each, that is a grand total of 4,300,000,000 dollars. Of this amount the cars sold on instalment (90 per cent. as we have just said) represent a total sum of 3,870,000,000 dollars. If from that sum we deduct the 25 per cent. put down at the moment of purchase there remains a credit of \$2,895,500,000 which distributors of automobiles have granted to American customers. If we made similar calculations for products of different kinds which the public buy on instalments, we should arrive at some very imposing figures. And when one realizes that these milliards are expended almost entirely for purposes of amusement there is need to question the moral and social consequences of a method of business which eggs people on to such evident excesses.

It must be admitted that the sale by instalment plan practiced in business on such a vast scale as we have indicated makes a breach in that prudence and foresight and that sense of saving which are the defensive walls of a sound economy both domestic and social. I heartily agree with the opinion of Henry Ford when he declares in striking words:—

"There is too much debt for one thing; too much instalment buying. We must learn to call credit by its name—debt. When financiers flourish on credit you may depend upon it that many other people are withering under debt."

The smallness of the initial expenditure and of the periodical payments together with the prospect of immediately acquiring the desired article makes people lose sight of the total price and induces millions of families and indi-

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viduals to procure goods they could quite easily do without and for which they can not pay cash for the simple reason that they have not in hand the necessary money. So they are induced in 9 cases out of 10 to dedicate to their purchases sums much higher than would have been the case had they been able to pay cash.

They are thus doubly impelled by the instinct of luxury towards waste: the two most active destroyers of the spirit of foresight and thrift, those basic elements of human welfare, both individual and collective.

Destroys Spirit of Economy

We rightly deplore the diffusion amongst the labouring classes of the frenzy for luxury. It means the breaking down amongst all classes of the spirit of economy, the propagation in country places as well as in populated towns of costly living which wastes incomes, placing families under what one may term perpetual bondage to creditors. In a good many cases they are pushed over the border-line of poverty, to await their being uprooted and flung out on the road of destitution.

Let us exaggerate nothing, but let us admit that this regime of the instalment plan does not in the least remedy this state of things which is deplorable in itself and of which in 80 per cent. of cases it is itself the principal cause, the more sure means of maintaining and propagating it. We are, moreover, forced to remark that all service rendered exacts its compensation, and that the presumed advantages which the seller by instalments procures for his customers he makes good on his own account by an equivalent raising of prices. I do not criticize the idea; I simply state the fact. We know that the development of the instalment plan has favoured the formation and multiplication of financial associations of a new type which take the place of banks for the purpose of discounting the notes of customers guaranteeing to the merchants the liquid resources of which they have need. Who makes these companies thrive? Evidently the consumer, for it is he who repays with interest the commission paid by the merchant. To illustrate what I am saying permit me to read an extract from a typical circular issued by one of these financial concerns giving the terms which they impose on merchants. (Borrowed from the "Revue Economique Internationale").

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(1) Our commission varies according to the duration of the credit granted to your client (maximum 12 months) and is based on the nominal value of the notes for which he has signed.

| | |
|--------------------------|-----|
| Payment in 4 months..... | 4 % |
| Payment in 5 months..... | 4½% |

(and so on, the rate increasing by $\frac{1}{2}$ to 1% per month up to 8% which is the rate exacted for a credit of 12 months).

(2) We advance 80% of the nominal value of the notes to be refunded first of all out of the instalments; our commission being deducted from the advance allowed. The balance of 20% is remitted to you after the final collection.

(3) All the notes must be endorsed by you (the merchant).

Consequently, under these terms and conditions, the consumer must repay this commission, in addition to covering all risks which the merchant assumes on selling by credit, besides the interest on 20% of the total sum which he (the merchant) will not receive until the entire balance is paid.

Here is the working of an instalment plan established according to the conditions laid down in the circular just quoted:

(I) Sale price to consumer:

| | |
|------------------------------------|-------|
| Cash Price | \$100 |
| Additional for sale on credit, 10% | 10 |
| <hr/> | |
| Total: | \$110 |

(II) Cash Receipts of merchant:

| | |
|---------------------------------------|----------|
| (1) Cash on account | \$20 |
| (2) Advanced by financial concern: | |
| 80% of \$90 representing the notes | |
| of client | \$72 |
| (3) Deduction of 8% of commission | |
| (payment in 12 monthly instal- | |
| ments) | 5.76 |
| (4) 11th and 12th monthly instalments | \$18.00 |
| <hr/> | |
| Total: | \$104.24 |

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The merchant, as you see, receives \$4.24 above the cash selling price in order to cover his risks and interest charges. The annual rate of interest put, so to speak, to the account of the consumer is increased to fantastic proportions so that it sometimes reaches 25, 30 or even 35 per cent. In truth, I cannot see how such a costly system of credit can serve the interests of the consumer—be he a labourer, a farmer, an ordinary office clerk, or any other wage earner whose little income is thus burdened and harassed by the most uncertain of futures.

From the social point of view I think it is wholly bad to favour the propagation of luxury, to accustom people to a mode of living out of all proportion to their means and of necessity running them into debt. The instalment plan seems to me inevitably to involve this triple consequence.

The Economic Aspect

But it is not only the social aspect of this problem which need cause us concern. The economic aspect also merits our attention.

I am thoroughly in agreement with those protagonists and defenders of the system who affirm that this form of credit benefits abundantly such and such an industry or such and such a type of business. I perfectly agree that this credit plan is very satisfactory when it permits, with a small outlay of money, a farmer to procure agricultural implements which he badly needs to increase the production of his farm, or the doctor and commercial traveller to procure the automobile by means of which they will be able to visit in a shorter time a greater number of customers. It is also undeniable that the automobile industry, for instance, has profited by it enormously. And, therefore, I was exceedingly surprised the other day to read the statement I have already quoted from Henry Ford, who some 20 years ago set out to "put America on wheels," to use his own phrase. How could this be realized by Ford and his imitators except by mass production of cheap cars and by selling them in enormous quantities on easy terms by means of the instalment plan?

But economic progress should not be confused, I think, with the progress of the automobile industry, and commercial stability must be attributed to other factors than the unceasing multiplication of certain makes of touring cars.

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The instalment plan is not practicable in all classes of trades. There are certain branches of trade to which it is completely closed. It is found that the branches of trade in which the deferred payment system cannot operate are precisely those which respond to the immediate necessities of man—food, clothing, etc., (with the exception of certain articles, notably furs).

Whatever happens, the grocer at the corner grocer cannot to-day, if he is not paid, recover possession of the groceries he sold a week or a month ago—the same is true of the baker, butcher, tailor and shoe merchant. These merchants sell commodities for immediate consumption, constituting the fundamental basis of the family budget, for no one can do without them.

Essential Trades are Affected

Again by the introduction of the instalment plan or the principle of deferred payments these branches of commerce find themselves in an inferior position as compared with others. The labourer and the office clerk can no more do without their bread and meat than the industrial millionaire. But they can easily dispense with an automobile or a six or eight tube radio! Nevertheless, in a sense it is easier for them to buy a radio, or an automobile, than to procure the bread of which they have a daily need. There at least we have a curious anomaly—an anomaly, moreover, which has its consequences. To what does it amount in many cases? People have pledged their future incomes. Should a stoppage of work take place and the income drop, financial embarrassment follows immediately and with it the prospect of suspending the weekly or monthly payments. The consequences of this may be the seizing of the article on which one has paid a fraction more or less important and which entails also the loss of the money already expended. To avoid this loss people begin to neglect for weeks and months the bills of the baker, the butcher or the milkman.

The radio merchant does not suffer; he receives regularly each week or each month the money due to him. The consumer himself is not greatly inconvenienced—he simply keeps one creditor waiting while he satisfies the other. The person who really suffers is the baker, the grocer, the milkman or the butcher. Everybody will admit this. That is to say, the essential branches of commerce must suffer—until

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the day they decide to take action and cut off supplies. Then in many cases the St. Vincent de Paul Society or the Salvation Army gains another client.

Generalize this situation, propagate this commercial practice which is the principle of it. To compensate themselves for the losses they have suffered by the numerous outstanding accounts, partially or totally unpaid, the baker, the butcher, the milkman, the grocer, etc., must raise their prices. The result is that the exaggerated development of the instalment plan in many branches of commerce causes a general rise in the cost of living.

Raises Costs to Consumer

Actually, turn the matter over and over as one may, making the most ingenious distinctions between the consumption, utilization and destruction of resources, it is the consumer who pays—and he pays for all the services, good or bad, that he receives.

And note that this rise in prices does not show itself at the production end of business in the form of a rise in salaries, but in the distribution of goods by the immediate increase of selling costs. Its repercussion in the general economy of society will not be the same in the one case as in the other. A rise in salaries increases the cost of production, but at the same time enhances the purchasing power of one whole class of consumers. Now purchasing power and consumption, consumption and production are all linked and bound together. They form the tripod of economic activity. If the consumer has more money, he consumes more; and if consumption increases, production benefits thereby. This is the only rational way to favour the development of economic activity and to stimulate a gradual rise and to maintain the standard of living.

But this is not what happens in the case we are considering—indeed, it is the contrary that usually happens. As we have already said, the selling costs are increased, and this does not better in any way the purchasing power of the consumer. The raising of the "standard of living" by the spreading amongst the mass of the people of luxury articles which are not paid for is wholly artificial. It is founded on the multiplication of debts and is nothing else than an upsetting of the stability of the consumer's budget. It is also a dissociation of the three elements of economic activity just

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mentioned—namely, purchasing power, consumption and production.

It is affirmed that the multiplication of sales made possible by the instalment plan favours mass production and allows in consequence a reduction in the retail price. That is true. But it is only true of certain industries. It is undoubtedly true that we pay less for automobiles to-day than was the case 10 years ago. That this drop in the price of motor-cars must be partly attributed to the multiplication of sales rendered possible by the deferred payment system, I am well aware. That the automobile industry has profited thereby is evident. But that does not for a moment alter anything I have said. It is *one* industry. It is *one* or a *few* types of industry that have benefited to the detriment, perhaps, of other trades and industries. But the whole of our economic system does not progress normally in all its parts. *There* is precisely the danger which threatens the stability of business.

An Advance in Demand

Then, even for those branches of trade which benefit most to-day from the deferred payment system, is it a method of transacting business upon the security of which we can trust? Mr. Claoué (whom I quoted a moment or two ago) writes:

“The instalment plan cannot be considered as an altogether normal outlet of production. The facility which the deferred payment system offers can easily lead several consumers to acquire objects which otherwise they would do without, increasing indeed the effective demand, but more often operating in advance of the future demand.”

It favours the “saturation of needs,” a relative saturation no doubt which an adjustment in prices or a more intensive employment of credit may momentarily cause to disappear, but which will repeat itself at periods growing ever nearer and nearer.

Some have alleged in reply to this objection that human needs can be extended indefinitely, that a more active production will never entirely satisfy them and that in consequence a foreseen fluctuation in the demand is not to be dreaded. This is only the same fallacy as that of the man who confuses his particular industry with the whole economic structure of a society or a country. That human

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needs can be extended indefinitely may very well be the case. But can anyone say that of any particular human need?

Now let us not forget that the deferred payment system is only practicable in a given number of industries, as also for a given number of human needs. It is certain in any case that the automobile industry amongst others is one in which the demand can only be kept up by the lowering of prices and the extending of credit periods. Here is what was written on the subject last year by Mr. Francis Rodd in the "Economic Journal":

"On motor cars it has hitherto been the general practice to pay the balance due after an initial cash payment in twelve equal monthly instalments. In California, however, where the proportion of passenger cars to inhabitants is as 1 to 3.4 compared with 1 to 7 over the country as a whole, it is difficult to sell a car except on eighteen months' credit. Various excuses have been advanced, but the truth probably is that the wish is so near to-day's saturation point that such a stimulus is required to maintain sales at a profitable level. It is admitted that there is a general tendency to lengthen the terms of credit. Quite recently it has been announced that payments spread over fourteen to sixteen months were becoming more and more frequent all over the United States."

It is a fact. There is no need to foresee in consequence of this credit system a special modification, durable and important as regards markets, able to satisfy the growth of a production which a momentary excitement of demand provokes. And as Mr. Claoué says:

"If for other reasons the intensity of demand does not lessen, we shall soon find ourselves confronted with a more serious danger because production will have been increased to cope with a temporarily inflated demand. The consequences will be, trade losses, the closing of factories, a stoppage."

Conclusion

To sum up and to come to a conclusion, I see no reason to partake in the enthusiasm of those who see in the incessant spreading of the instalment plan a pledge of future progress, and I should like to see this considered opinion more generally adopted. If the deferred payment system is allowed to spread, to become common, it must take on a form accessible to all branches of business and on condition

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that it does not destroy the equilibrium or disturb the harmony and the organic working of society. Under its actual form of sale by gradual payments it provokes, it is true, prosperity in certain branches of industry, but it is a hazardous prosperity and at the same time an artificial one, because it menaces the fundamental stability of the economic order. At the same time it causes the spreading of habits of life which from a social point of view are worse than a menace because they are an evil in themselves.

We may well take to heart the moral of the fable, because it is stamped with thoughtfulness and prudence: "Never sell the bear's skin before you have killed him." The true formula of economic progress as indeed of all progress, of enduring progress, of progress which builds up in an orderly fashion—does not consist in compromising the future to adorn the present, but rather to prepare for the future by consolidating the present.

Cost Meeting for Lithographing Industry

A MEETING was held at the King Edward Hotel, Toronto, on December 3rd, under the auspices of the Canadian Society of Cost Accountants, for the discussion of costing problems of the lithographing industry. There was a good representation of the firms in the industry, some of those present being already members of our Society. The following is a list of those present:

F. C. McElroy and L. Rhodes, Consolidated Lithograph Manufacturing Co., Ltd., Montreal; G. M. Markham, Federated Press, Ltd., Montreal; W. S. Campbell, Montreal Lithographing Co., Ltd., Montreal; Travice A. Tod, Canadian Lithographers' Association, Montreal; Mr. Shaw and Miss Ross, London Printing & Lithographing Co., Ltd., London, Ont.; C. E. Wigle, Howell Lithographic Co., Ltd., Hamilton, Ont.; E. B. Thompson and M. Close, Duncan Lithographing Co., Ltd., Hamilton; F. O. Lawson, Davis & Henderson, Ltd., Toronto; M. E. Cunningham, Offset Printing & Lithographing Co., Ltd., Toronto; A. C. Thompson, Thompson & Sons, Ltd., Toronto; G. R. Wallace, Business Systems, Ltd., Toronto; G. H. Houston, Rolph-Clark-Stone, Ltd., Toronto; James Turner, C.A., the T. Eaton Company, Ltd., Toronto; W. A. McKague, Canadian Society of Cost Accountants, Toronto.

Mr. Turner, president of the Canadian Society of Cost Accountants, welcomed the representatives of the industry, and spoke briefly of the work which the Society aims to perform. He then asked Mr. McElroy to take the chair. Some figures were presented as to manufacturing costs, based on the experience of a number of lithographing firms, and these were discussed in detail. The meeting then proceeded to discuss some principles on which costs in the industry should be figured.

This meeting followed an earlier one, held on March 26th last, and represents a further stage in the progress of cost work in the industry. Thanks were tendered to the Society for its efforts, and plans were discussed for a further meeting.

Work of the International Labour Conference, 1928

ON October 17th, H. H. Champ, Vice-President of the Steel Company of Canada, Ltd., addressed our Hamilton Chapter, giving an outline of the work of the International Labour Conference of the League of Nations. The 11th session of this conference was held in Geneva last May and June. Of the 55 countries which are members of the International Labour organization, 46 sent delegates to this session, a number which was previously exceeded only in 1925.

From Canada there was a complete delegation, representing the Government, employers, and workers, with technical advisers for each group. Mr. Champ was one of the employers' representatives, and the official records show that he, and other Canadian delegates as well, took an important part in the proceedings.

In his address to our Hamilton Chapter, Mr. Champ laid stress on the improvement in feeling between employers and employees, and between one country and another, which has resulted from these conferences. He cited as an example, one workers' delegate from Germany, with whom he had conversed freely, and who admitted that had it not been for such meetings he would probably not have spoken to Mr. Champ.

We have not a verbatim copy of Mr. Champ's address, but the following extracts from a report published in the Labour Gazette cover part of the ground with which he dealt:

The Agenda of the Eleventh Session of the Conference comprised two main items, namely: (1) Minimum Wage-Fixing Machinery, and (2) Prevention of Industrial Accidents, including accidents due to coupling on railways. The first of these two subjects was under consideration by the Conference last year and was presented on the present occasion for final action. The second subject, namely, the prevention of industrial accidents, was presented for general consideration with a view to the formulation of proposals which might be finally dealt with at the session of the Conference which is to be held next year.

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The decisions of the Eleventh Conference may be summarized as follows:—

Minimum Wage Fixing Machinery.—By 76 votes to 21 the Conference adopted a Draft Convention concerning the creation or maintenance of minimum wage fixing machinery in trades, particularly home working trades, to be determined by each state.

By 81 votes to 18 the Conference adopted a Recommendation embodying general guiding principles for the application of such machinery.

Prevention of Industrial Accidents.—By unanimous votes the Conference decided to place on the agenda of the 1929 Session:

The General Prevention of Industrial Accidents; and
The Protection against Accidents of Workers
Employed in Loading or Unloading Ships.

By 94 votes to 5 the Conference adopted a draft Questionnaire relating to the prevention of industrial accidents in general, to pave the way for next year's discussion.

By a unanimous vote the Conference adopted a draft Questionnaire concerning the protection against accidents of workers employed in loading or unloading ships. By a unanimous vote, the Conference decided that the opinion of the Joint Maritime Commission should be obtained on the maritime aspects of any proposed Draft Convention on this subject, and should be communicated to Governments.

By a unanimous vote, the Conference adopted a resolution in favour of the appointment of a Joint Committee of Governments, employers and workers to study the question of coupling accidents on railways, with special reference to the use of automatic couplings.

By a unanimous vote, the Conference adopted a resolution outlining the steps which should be taken to assist the "Safety First" movement.

By a unanimous vote, the Conference recommended that the International Labour Office should be authorized to continue its comparative study of national safety legislation.

Accident Prevention

The discussion on the subject of Accident Prevention was based upon a report which had been prepared in advance by the International Labour Office, describing the

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legislation and practice of the different countries as regards the prevention of industrial accidents, and containing proposals for a questionnaire. The discussion showed that the delegates from all countries, whether representing Governments, employers or workers, were unanimous in the opinion that no stone should be left unturned to prevent accidents to industrial workers, on business grounds as well as for humanitarian reasons. It was generally agreed that, while much had been done in recent years to reduce the toll of accidents by public and private action, much still remained to be done. There was, however, a certain difference of opinion as to the lines which future action should take, or, more precisely, as to the form and direction of any proposals which might be formulated by the Conference for future action.

Several representatives of Governments took the view that, while legislative measures must continue to keep abreast of the developments of industrial methods and equipment, the paramount need of the moment was for the encouragement of voluntary effort to prevent that considerable proportion of accidents which was attributable to "the human factor" rather than to machinery. Those who held this opinion suggested that the Conference should confine itself to adopting resolutions, which could be done at this Session, instead of taking preliminary steps with a view to adopting a Convention or formal Recommendation at next year's Session.

Other delegates, notably the workers' representatives, while not disparaging the value of voluntary effort, contended that it could not produce full results unless it was founded on a sound basis of legislation and regulation. They urged, therefore, that the Conference should aim at the adoption of a Convention embodying minimum standards of public safety requirements.

All speakers agreed that accident prevention was a field in which co-operation between employers and workers was essential.

Mr. Tom Moore (Workers, Canada), spoke as follows, on industrial accident prevention in Canada:—

"I think I can very truthfully say that all sections of the community in Canada recognize the humanitarian standpoint of accident prevention, but we might go a little further and deal with the real incentive which, perhaps, governs the

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action of the respective groups. I would venture to summarize their motives somewhat as follows: The workers consider it good personal protection; the employers recognize it as entirely good business, while the Governments always find it particularly good politics to participate in the work. By these joint efforts great progress has been made, but there are still far too many industrial accidents occurring in the country from which I come.

"Emphasis was placed this morning on the extent to which the human element contributes towards industrial accidents, being indeed the major factor. I think our country probably compares favourably with others with regard to the small percentage of accidents which can be attributed to the absence of guards on machinery, and so on. In considering the contribution of the human element I think we should go a stage further, and try to find out what causes the human element to contribute to the accidents. We find—and I think statistics in other countries corroborate it—that a very great contributing factor is the exceedingly long hours which are demanded from workers in monotonous and mass-production employment. We find that the prevalence of accidents increases as the hours of work are extended, showing that mental fatigue caused by mass-production and unnecessary long hours are a major contributing factor in industrial accidents. The second very important factor in a new country like Canada is the tendency to place untrained workers in charge of machinery which may endanger the lives of other workers, such as hoisting machinery, building scaffolding, etc. Men without proper knowledge of how to handle such machinery are allowed to do so, and innumerable accidents are thereby occasioned.

"Whilst voluntary educative work is very essential, as was said this morning, to create the proper atmosphere, I wish to corroborate what Mr. Bevin has said on the necessity of a legislative basis for work of this nature. Unless we have a legislative basis you will find an unwilling minority opposed to the carrying out of safeguards which the more advanced have already adopted. We find, as has previously been stated, that legislation such as that for workmen's compensation which creates a charge on industry, especially where you have the state collective funds, as we have in the Dominion of Canada, has been a very large influence in awakening the conscience of many employers to the necessity of preventing accidents from the point of view of the finan-

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cial cost alone. They have been very largely active in getting the Compensation Boards to create departments for the study of the prevention of industrial accidents, and to some extent are extending that work to the prevention of industrial diseases.

Mr. Champ (Employers, Canada), moved the following resolution:—

Whereas enquiries undertaken in certain countries in particular industries and on the national scale have made valuable contribution to the improvement of production and of working conditions, thereby enhancing the prosperity of employers and employed alike; and

Whereas increased production is prevented by such causes as: Accidents; Inadequate attention to ill-health and physical defects; Irregularity and instability of employment; Mutual fears and suspicions, and barren conflicts which might be avoided by better understanding between employers and employed; and Whereas such causes, by affecting production, finally reduce the volume of wages which employed and the community might otherwise enjoy;

Therefore be it resolved:

That, in the common interest of employers and employed, this Conference requests the Governing Body to consider the advisability of instructing the International Labour Office to collect reliable and detailed data regarding methods adopted to decrease or eliminate the various causes of decreased production herein enumerated, referring, however, to other organizations of the League of Nations or to the International Institute of Scientific Management such portions of the subject as may be considered to come under their competence.

At the same time, Mr. Champ submitted the following resolution:—

Whereas it is contended that a policy of active collaboration between employers and employed, such as exists in certain countries, has resulted both in an improvement in the level of real wages and working conditions and also in greater and more economical production; and

Whereas the economies resulting from such collaboration can also be made available for the benefit alike of the employers, employed and the community as a whole;

Therefore be it resolved:

That this Conference requests the Governing Body to consider the advisability of instructing the International Labour Office to follow with due attention the progress of the spirit of collaboration between employers and employed, and to report on the subject from time to time.

In moving these resolutions, Mr. Champ said:—

“You will note, Mr. President, that I have placed accidents first among the causes of waste in industry. As a concrete example to show, why I have done so, I may say that it is computed that in the United States in 1919, the actual time lost as the result of 2,977,000 non-fatal accidents amounted to 50,000,000 working days. Loss of future earning power as a result of complete or partial disability arising out of 115,000 of these same accidents was estimated at

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100,000,000 working days; and loss of earning power resulting from 23,000 fatal accidents, at 138,000,000 working days. In other words, a total loss of 296,000,000 working days resulted from accidents which occurred in the year 1919. Since that date efforts towards accident prevention have greatly decreased such loss. The very close consideration which has been given to accidents at this Conference will certainly give a great impetus to the movement directed towards their prevention. The literature distributed here by the United States and by the various states belonging to the Conference is certain to have beneficial results. Not only on sentimental and humanitarian grounds, but likewise on purely economic grounds, the decrease of accidents is a subject of paramount national importance, demanding the close attention of all countries. This year's effort in Geneva will assist, in all countries, the Safety Leagues and other kindred organizations working towards a decrease in the appalling list of accidents. Since I left Canada the Annual Meeting of one Safety League was held in the city in which I live. Over 1,000 delegates were present at their own expense, travelling great distances, in some cases many hundreds of miles, in order to be present at a meeting where methods for prevention of accidents were to be discussed. I mention this, Mr. President, to show that Canada, while a young and sparsely populated country, is alive to the importance of this subject, and the report which I will make upon my return indicating the large amount of time devoted to the subject at this Conference will spur our organizations on to even more vigorous action in the future.

"Second among causes of 'waste' I have placed ill-health. Various investigations place the annual loss of time due to ill-health at from 6 to 9 days per head. In Canada and the United States many employers have adopted various schemes of medical supervision and nursing services; generally speaking, such efforts have had beneficial results, and the collection and dissemination of information regarding such experiments should be helpful from an international standpoint.

"Irregularity and instability of employment is one of the most difficult problems with which to deal. The causes vary in different countries. Climatic conditions have an important bearing upon the matter. Possibly little can be done in this field internationally, but it is a subject which in

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each country is worthy of careful study from the standpoint of the country's particular conditions and needs.

"Last but not least, Mr. President, I come to the clause of my resolution which cites amongst causes preventing increased production mutual fears and suspicions, and barren conflicts which might be avoided by better understanding between employers and employed. From various issues of *Industrial and Labour Information* I have gathered for the years 1925, 1926 and 1927 some statistics regarding working days lost in various countries owing to industrial disputes. The figures are:

| | Working Days |
|----------------------------|--------------|
| France, 1925 | 2,046,563 |
| India, 1926 | 2,019,970 |
| Sweden, 1926 | 1,711,200 |
| Australia, 1926 | 1,415,300 |
| Czechoslovakia, 1927 | 1,395,024 |
| Great Britain, 1927 | 1,175,000 |

As to who was in the right and who was in the wrong, or as to the proper division of responsibility between workers and employers for these industrial disputes, I, Mr. President, have of course no knowledge and no opinion. But, Mr. President, we must all agree that time so lost was in the past, and in the future will be a cause preventing increased production. In Canada during the year 1927 there were 165,288 working days lost through industrial disputes; the time so lost would have been very much greater were it not for the fact that year by year a better understanding is taking place between employers and employed.

"From a lifetime's experience in the iron and steel industry, and from a close observation of other industries in the country from which I come I am convinced that the causes mentioned are there the principal reasons causing waste in industry. To me it therefore appears desirable that there should be collected and disseminated all data having a bearing upon the decrease or elimination of the causes with which I have thus briefly dealt. I know of no organizations better fitted to do this work than those mentioned in my resolution and I therefore have great pleasure in moving:—

That in the common interest of employers and employed, this Conference requests the Governing Body to consider the advisability of instructing the International Labour Office to collect reliable and detailed data regarding methods adopted to decrease or eliminate the various causes of decreased production herein enumerated, referring, however, to other organizations of the League of Nations, or to the International Institute of Scientific Management such portions of the subject as may be considered to come under their competency.

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"Mr. President, Ladies and Gentlemen, for the reasons given earlier in the day, slight changes have been made in my Resolution as originally presented. It now reads:—

Whereas, it is contended that a policy of active collaboration between employers and employed, such as exists in certain countries, has resulted both in an improvement in the level of real wages and working conditions, and also in greater and more economical production; and

Whereas the economies resulting from such collaboration can also be made available for the benefit alike of the employers, employed and the community as a whole;

Therefore, be it resolved:

That this Conference requests the Governing Body to consider the advisability of instructing the International Labour Office to follow with due attention the progress of the spirit of collaboration between employers and employed and to report on the subject from time to time.

"You will note, Mr. President, that the keynote of my Resolution is collaboration between employers and workers. Since the resolution in slightly different form was published in the *Provisional Record* a large number of Delegates have spoken to me on the matter. Practically all have agreed that in Canada and the United States collaboration has been effective. A considerable number, however, have contended that such collaboration is not possible in Europe. My knowledge of European conditions is insufficient to enable me to judge of the correctness of the contention. I do know, however, that some years ago in Canada when collaboration was in its infancy there, some Canadians took the stand that it was impracticable and they have since come to see that they are wrong. You are all familiar with the scriptural text 'The house that is divided against itself cannot stand.' You are also familiar with the proverb, 'In unity there is strength.' To me it appears that unity is collaboration and that strife between an employer and his workmen is the case of a house divided against itself. Before proceeding further I wish to say that personally I am a strong believer in collaboration.

"Many schemes fall under the general classification of collaboration. In Canada only one of those with which I intend to deal is enforced by legislation; that one is 'Workmen's Compensation.' Under that law each employer pays into a fund a certain percentage of his payroll, and out of such fund the workman draws a percentage of his salary while absent from work on account of accidental injuries. In twelve years (1915-1926) the Steel Company of Canada, of which I am Vice-President, has paid out in this way

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\$1,184,523—that is the equivalent of nearly thirty million French francs. Who will contend that a worker is not more satisfied from knowing that his earnings do not cease if he is unfortunate enough to meet with accidental injury?

“Of the voluntary efforts at collaboration I will mention first Group Insurance. Under that scheme an employer effects life insurance upon all his workmen. Some grade the amount according to length of service, some according to yearly wages, while some have the same amount of insurance for each workman. Some employers pay the entire cost. In some companies the cost is divided between the employer and the workmen. In all schemes participation is voluntary upon the part of the workman. Who will say that a workman so insured is not more contented and satisfied from knowing that in the event of his death a policy is payable to his heirs?

“Another method of collaboration is ‘Housing Schemes’ under which system houses are built by the employer and sold on a monthly payment system to the workmen. We find that workmen who own their home or who are on the way to owning their home are less likely to change employment, and a decrease of labour turnover is desirable from all standpoints.

“In Canada various medical and nursing schemes have been introduced, sometimes limited to the workman, and sometimes covering the workman and his family. All such schemes have resulted in a better feeling between the workmen and employers.

“Old-age pension schemes of various kinds have been introduced by many employers. In my own company pensions have been or are being paid to about 90 employees, and under our pension plan employees do not contribute anything to the fund.

“Possibly one of the most effective methods of collaboration has been profit-sharing by the sale of stock on monthly payments to the workman. The workman thus becomes in part worker and in part employer. His total income is dependent upon the company’s profit.

“Last but not least I mention ‘Shop Councils’ to deal with grievances and other matters of importance to worker and employer alike. The system of Shop Councils is rapidly extending in Canada.”

Mr. TALLON (Workers, Canada).—With regard to the Resolution itself, a resolution of this kind coming from the

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employers might possibly be looked upon with suspicion, but I can assure you that that is not the feeling of the workers in the Dominion of Canada. As a matter of fact suggestions of this character have come from the Workers' Group in this Conference in times past, and experiments have been carried on generally throughout Canada and the United States. Speaking as a trade unionist who has had considerable experience of movements of this character, I want to say that we in Canada have advanced beyond the terms of the resolution. We have advanced to the extent of working co-operatively with the employers on a programme of union management and co-operation. We have advanced beyond the field of individual collaboration, of welfare plans, and of individual profit sharing schemes. We have arrived at a position in which our organized workers, with all the freedom of action which prevails with such organization, are actively co-operating with managements, particularly—to take a case in point—in the Canadian National Railways, to the end that we may improve working conditions on the railways, minimize waste of materials and of labour, and give better service to the public. I maintain that to carry out the spirit of the Resolution in a logical manner, it is necessary for the workers to be organized, and to be organized thoroughly, just as they are organized to participate in the work of this Conference.

Fundamentally, there must be organization, and logically there must be organization, to carry out the spirit of the Resolution that is before you.

We have been devoting a very considerable amount of our time here to questions of general accident prevention and other questions that our committees have been engaged in, and I am firmly of the conviction that such discussions, to be really effective, should take place on the job where accidents occur. This can be done to the best effect, in my estimation, by such co-operation as I have mentioned. These things are features of our co-operative movement, together with matters of all general interest that affect both parties. This co-operative movement is separate and apart from our wage negotiations. Our negotiations are under general rules. These features are kept carefully separate, so that the co-operative movements themselves should be as non-controversial as it is possible for them to be.

The benefits to be derived from union management co-operation rather than by individual collaboration are that

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many of the evils of the latter are removed, such as individual partiality, individual egotism, possibility of discrimination. Before any suggestions are made in our co-operative gatherings, they are carefully revised and discussed, and debates held upon them by men absolutely and thoroughly familiar with the industry, and for that reason are well worth while when they are made subject matter for the meetings. When that time comes suggestions are placed on the minutes of the official proceedings which are sent to the higher officials of the management and to the chief officials of the Organizations, so that they cannot be submerged owing to prejudice that might exist on the part of lesser officials. As I can say, briefly, we are very well satisfied with the progress that has been made in that direction. It has been found that, by such free and frank discussions, we have been very successful in stabilizing our industry. We have secured more work for the shops participating, we have brought about greater harmony between the men and the management, and have made the work more agreeable for all connected with it. We have established in our industry that team work which has resulted in great good to the community and the employer in each concern, that team work which was so necessary to place production on a sound and economical basis without waste or undue fatigue. As we develop the intelligence of our workmen, and they become acquainted with the intricate details of the problems of management, they become better workmen, and, by the same line of reasoning, they become better equipped to deal with the problem of the equitable distribution of commodities after they are produced, so that, for the reasons enunciated, and in accord with our experience, I am very pleased to support the resolution as offered by the Employers' Delegate of Canada.

The Hon. Peter Heenan, Minister of Labour, also took part in the debate on Mr. Champ's Resolution, speaking as follows:—

"It is quite evident to me that the atmosphere of Geneva has a good effect when I find the Canadian Employers' Representative advocating collaboration, and the Canadian workers' representative in agreement with the Resolution. There can be no doubt that great losses have resulted through mutual fears and suspicions, and conflicts arising out of the absence of machinery for consultation and adjustment. Improvement in the level of real wages, and of

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working conditions, is more likely to be achieved under an industrial programme of collaboration between employers and workers than under a system where antagonism, suspicion and fear prevail. The surrounding of the worker with security against life's major risks is one of the most important tasks in the world to-day. But full security, coupled with the highest wages ever paid, will not necessarily bring social justice or human happiness. Security, however, is the first plank in any sound industrial relations platform. The progress of social legislation must be based squarely upon economic prosperity, a nation or an industry cannot divide that which it has not got. Prosperity, therefore, is a first essential of better conditions. Prosperity will come more quickly through collaboration than through conflict. This is a principle I have advocated in Canada for many years, and, as Minister of Labour, I am glad to see the Representatives of the Canadian employers and workers in agreement on this subject."

Name of the Society

Can you suggest a better name for our Society? Recognizing the fact that the field covered in our papers and discussions very properly extends beyond the work of cost accounting itself, the directors of the Society, at a recent meeting, voted a prize of \$10 to be awarded to the one suggesting a name which receives the approval of the directors.

All suggestions should be forwarded to the office of the Society, 81 Victoria St., Toronto, and will be considered by the directors at an early date.

The Principles of Cost Finding

A Fifteen-Minute Paper read by Miss E. M. Jenkins at a meeting of the Wellington Accountant Students' Society, on 7th June, 1928

(From The Accountants' Journal, New Zealand.)

THE extreme importance of cost finding has been considerably enhanced during recent years owing to the increasing competition, changed conditions of manufacture, and also to the multiplicity of articles of the same character now upon the market.

Many there are, even to-day, who say such details are unnecessary, and vainly strive to assess modern business on the lines of a century ago. This attitude is useless to themselves, and useless to the world in general. When a printer secures a contract by under-bidding his competitor, the fact that he is going to make a loss on the deal is not nearly so perturbing as the fact that he has robbed others of an order quoted at a price which would have shown a fair profit—and which brings in its train a demoralizing effect upon the market generally. Hence business is becoming more and more altruistic. For instance, when the Interstate Commerce Commission in America found it necessary to inaugurate a uniform system of accounting for all railroads, a step was taken towards lower operating costs; nowadays, in America, every manager may study at his leisure the costs of other railroads, and thereby obtain valuable information as to where his own costs are too high.

Briefly stated, the object of keeping cost accounts is to enable a manufacturer or contractor to ascertain the cost of every article he produces, and of every contract he undertakes. Armed with this information, he can enter the market and:—

- (1) Regulate his selling price according to cost, and as far as the conditions of supply and demand exist.
- (2) Accurately frame his estimates and tenders so that he is prevented from making a loss, and also from bidding too high, so that his competitors may undercut.
- (3) Find out which branches of his business do pay, and which do not.

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- (4) Establish a basis of cost for certain stock articles for comparison and other uses.
- (5) Lay his finger upon the loopholes in his organization.

Now it is obvious that these advantages cannot be obtained without the expenditure of time and money. The fundamental basis of any cost system—indeed, for that matter, of any accounting system at all—lies in its complete efficiency, and complete efficiency lies in the tying together of all details so that there is no loophole for the escape of any item whatsoever.

Rough systems are useless; even though they mean lack of expense, the fact that their accuracy or otherwise can never be proved, makes them valueless. It would be better, probably, to do without a cost system altogether, than to place reliance in one like this.

Even ready-made systems are useless, because every business varies in many details, and though the underlying principles can be taken to be the same, their application must be suited to the particular business under consideration; and the scope must be sufficiently wide to allow alterations or revisions when the handling of other articles is undertaken. I have in mind the case of a large American manufacturer, making small tools, who by the purchase of additional machinery, entered the market for large machinery, and used his existing cost system for the new operations, just enlarging it to cover the additional turnover. After about twelve months, although his sales of the new machinery were excellent, he discovered he could no longer compete with other manufacturers of small tools. He sought the advice of a cost expert, and after a thorough searching, discovered that the amount of overhead charged to the small tools was out of all proportion to the turnover received therefrom, and a thorough revision of his cost system was necessary.

While all this is borne in mind, it must also be stated that over-elaboration in this, as in any other matter, is just as fatal as is the rough and ready method just mentioned. The essentials of the system are to give quickly and easily the details required by the manufacturer or contractor and to reconcile with the ordinary accounting records of the concern.

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The principal divisions in arriving at cost are as follow:

1. Direct Charges, or prime cost.
2. Indirect Charges, or on-cost.

Direct Charges comprise materials, direct wages, chargeable expenses.

Materials comes up first for consideration, and the details of these come from the Purchases Account in the general accounts of the company, and this is one of the first points for reconciliation. Complete and regular inventories should be taken and these agreed with the balance in the materials account—for this it is necessary to establish unit costs of all materials. These are arrived at by taking the original price of the goods, and adding thereto all charges incurred in getting same into store, such as: freight, cartage, handling, duty, etc.; then the total amount is taken as the complete cost of the article, and a unit cost per lb., ton, or per hundred can be arrived at. Further purchases can be added thereto, and the total cost averaged. This gives a basis on which to work as far as materials are concerned, both as far as concerns the amount used in manufacture and also the amount left in stock when the next inventory is taken.

The best way to keep check on these materials is by way of requisition. The materials in stock represent the definite balance sheet asset, just as the Banking Account and all withdrawals therefrom should be by way of definite requisition, just as one draws from the Banking Account by way of a cheque—or cash requisition. This should be done with all materials used, and done separately; it may seem to involve an immense amount of clerical labour, but the saving in materials by its efficient working, will more than compensate therefor.

This method of complete check on materials issued not only allows an inventory of goods remaining in stock to be easily taken, and also the amount of goods in manufacture to be quickly arrived at but it also avoids too large an amount being in currency. It is an astonishing fact that an ordinary workman who would not in the ordinary way be trusted with a petty cash account is sometimes left in charge of goods and stores worth some thousands of pounds; while it is not suggested that these may be converted to his own use, he may nevertheless flagrantly waste them.

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This material requisition will give the storekeeper all the facts he needs, and from it also the cost accountant has all the money particulars he needs.

Direct Wages, or more correctly, productive wages. Here again one is faced with the necessity of keeping the labour costs in agreement with the general accounting figures and this is best done by drawing the whole wages in one sum, debiting same to Wages Account, and transferring same through the journal after the correct allocation has been worked out.

The wages in most concerns form a very large item in the accounts, and the greatest care should be exercised in dealing with it, to prevent wastage and also dishonesty. In the case of very large concerns with hundreds of employees, it is very easy for a few extra names to be inserted in the pay roll, and their respective wages collected by an unscrupulous foreman either wholly, or shared with the people cited if they are not entirely fictitious.

The obvious way to avoid such happenings is the installation of a checking system, whereby all employees check in at starting time, and check out at closing time. This, however, does not entirely settle the matter, as it is quite easy for whole gangs of men to check in, and then remain hidden away,—even, indeed, leaving the plant after checking in, and returning later to check out.

We come again to the question of requisition—this time a labour or service requisition. The details of such a time-sheet will, of course, vary according to the class of work involved; but for a general sketch we could take a card:—

| NAME OF FIRM. | | | | | |
|---------------|----------------|-----------|--|------------|----------|
| Date | Employee's No. | Name | | Order No. | |
| Dept. | Machine | Part No. | | Pieces | |
| Schedule | St'd. time | St'd time | | Wanted | Finished |
| Time finished | (per unit) | Total | | | |
| Time started | | | | | |
| Time elapsed | | | | | |
| Rate | | Amount | | Operation. | |
| (Signed) | Foreman. | | | | |

This, of course, immediately meets the response—cost of setting up, filling in, and checking. That is all quite true, but the fact remains that these cards going into the cost accountant, and being sorted into heaps relating to the

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various jobs or contracts on hand; give him immediately the amount of time spent on each job, and also the complete amount of time worked, to be checked up against the wages paid. It also entirely obviates the payment of fictitious employees, as a card filled in in such a manner means that the worker was there, and did such work.

The next item is **Chargeable Expenses**, and these include all those other items incurred in the manufacture of an article, before its completed stage—ready for the market—in addition to the two previously mentioned. Such items are: Power (including electricity or gas for motors, coal for furnaces, oil and other accessories), electric light or gas for lighting purposes; rent; depreciation; supervision.

Taking these in rotation: **Power** accounts can be debited direct to the factory account, as all the machinery is usually in the factory; there is of course the question of a power account for a lift which is used for the office, store, and also the factory; but the allocation of such an account would depend largely upon the class of business undertaken.

Lighting. This could be allocated to the number of points.

Rent. Usually allocated according to floor space used.

Depreciation on Plant and Machinery can be debited direct.

Supervision. This is, wherever possible, charged direct to the work in hand; but in most concerns there is a portion of supervision which is intangible.

Miscellaneous & Indirect Material, i.e., material which cannot be directly used on a special job, such as nails, small tools, and other things purchased for use in the factory, and directly chargeable thereto.

These items make the materials overhead—or maintenance charges, and the question now is, their allocation between the various job or contracts undertaken.

Their agreement with the actual accounting books is dependent upon their being either debited direct, where they relate solely to the factory; or, where they have to be proportioned between office and factory, by their correct allocation through the journal.

Their distribution to the various articles undertaken is the most difficult of the operations and is the subject of great controversy between cost accountants. There are

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many methods drawn up for their allocation—one of the most popular is to distribute them according to the various time-sheets—a summary of which is easily and correctly ascertained from the labour requisitions already referred to. This is quite successful in many cases, but there arises the question of goods manufactured, which require but little labour, although much material and many hours upon the machines. There is another method, by which the cost of machine running is ascertained, and the time spent by the machines upon the various articles is taken as the basis for the division of the overhead. It has even been divided according to the value of the material directly used, though this is most inaccurate.

Adding together the three items debited to each class of goods manufactured, i.e., Materials, Labour, and Direct Expenses, we have the total cost of the goods made, and the cost per unit, gross lb. or ton, is a matter simply of division. This concludes the arrival at factory cost, and the goods are now complete and ready for the market.

We come to part two of the principal divisions:—**Indirect Charges, or on-cost.** This is in reality a second section of overhead, and includes all office and store charges incurred over and above the manufacture of the goods.

It naturally varies considerably according to the class of goods and depends upon whether the manufacturers run their own selling department; whether the articles require advertisement; whether their bulk makes freight and shipping charges an extra large item.

In arriving at these figures, care must be taken to see that no items are overlooked, such as interest on capital—if fixed and cumulative, or in the case of private firms—interest on loans, depreciation of office equipment, etc.

Ordinary charges such as salaries, travelling expenses, interest, depreciation, rent, lighting, etc., can be allocated in the same manner as is adopted for the factory overhead. Advertising expenses, where incurred for a special article, can be charged direct to that article; also special selling expenses, such as salaries for specialty salesmen, etc.

These expenses—comprising the on-cost—added to the prime cost give the total cost of the article; and it is upon this final cost that the actual selling price is based, the difference forming the net profit received by the manufacturer.

The Trend of Production Costs

IN financial circles, money is expected to be somewhat scarce, not only while our big crop is being handled, but probably for some months at least thereafter. This means rates a little higher than we have become used to in the past year. Also the opportunity for reducing overhead by funding debts, has passed by for the time being.

So far as labour is concerned, there is little change of importance this year. The number of strikes and lockouts was increased from 10 in September to 14 in October. At the end of the month, however, only seven of these remained in force, as follows:—Pulpwood cutters, Cochrane, Ont.; coal miners, Wayne, Alta.; men's clothing factory workers, Toronto; plumbers, Kingston; sheet metal workers, Kingston; carpenters, Vancouver and New Westminster; building trades, Vancouver and New Westminster.

Commodity prices, on the average, show little change in recent months, and are just a trifle below their average for a year ago. Goods for consumption, however, are up about four per cent. from a year ago, while producers' materials are lower. This means a slightly wider margin for the producer. The cost of materials for the building and construction industries about the same, but compared with a year ago, the cost of materials for manufacturing shows a decrease of about 4 per cent. The most important reductions are in grain and flour, sugar, furs, rubber, cotton, silk and tin.

Index numbers of commodity prices for October, compared with September, and with October last year, are as follows:

| | October, | September, | October, |
|---|----------|------------|----------|
| | 1927 | 1928 | 1928 |
| Producers' Materials | 143.2 | 139.8 | 139.1 |
| Producers' Equipment | 175.5 | 176.5 | 176.5 |
| Producers' Goods, all | 146.4 | 143.4 | 142.8 |
| Consumers' Goods (foods, beverages, tobacco) | 156.2 | 160.9 | 159.9 |
| Consumers' Goods, other | 152.3 | 157.8 | 157.6 |
| Consumers' Goods, all | 154.5 | 159.5 | 158.9 |
| All commodities | 152.6 | 149.7 | 150.2 |

These index numbers are percentages of average prices in 1913.

NEW BOOKS

New Books

MANUFACTURING. By Malcolm Keir, Professor of Economics at Dartmouth College. The Ronald Press Company, New York. 611 pages, \$5.

This is the first published volume of an "Industries of America" series, which is being prepared for issue by The Ronald Press. The other volumes are to deal with Agriculture, Lumber, Mining, Finance, Transportation, Communication, Geography, and Economics. Professor Keir is editor of the series as well as author of the volume on Manufacturing. In explaining the object of the series, he points out that the industrial history of the United States has had three broad phases. First there was the long period from independence up to about 1880, during which production was organized. Then, up to about the time of the War, attention was centred on marketing. The War revived the production problem, to an excessive degree. The third stage, which has now arrived, he views as one "in which the effort of the nation's business interests is to co-ordinate broadly the forces of both production and distribution and thereby secure a steady and continuing progress." The "Industries of America" series undertakes to give a comprehensive picture, in readable terms, of American industrial development.

This volume on Manufacturing is itself made up of chapters dealing with sixteen of the leading industries, with a few other chapters on the Development of the Factory System, Localization and Decentralization of Industry, American Labour, etc. So far as the industries covered are concerned, the book is a veritable encyclopedia of their origin, history and present condition. As such, it is not consecutive reading. Each one, however, is thoroughly done, and since the lines of manufacture covered are the most important ones, the book illustrates the development of manufacturing as a whole. As a work of reference, moreover, it is exceedingly valuable.

The "Industries of America" series should accomplish its purpose of summarizing industrial development on this continent to its present stage.

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GRAPHIC Charts in Business, by Allan C. Haskell, 451 pages, \$4 per copy. Codex Book Company, Inc., New York.

This is an exceedingly valuable book for any one who has occasion to use or to make charts, and that includes nearly every one in business. The author explains the general construction of charts from the ground up, but does not go into the technical points in connection with ratio scales, etc., since forms for any kind of chart can be purchased, and all the business man need know is how to use them.

Illustrations are given of the simplest designs, up to intricate charts which are intended to show related groups of figures. The author expresses the belief that the ratio chart has been somewhat neglected, because it appears to many to be complicated, whereas it really sets forth in graphic form what the business executive is repeatedly striving to construct in his own head. The trilinear chart, which is a new type, is also explained. The book covers organization, calculating charts, and those designed to show general economic trends, as well as charts showing the general trend of a business, and for its chief departments.

For the cost accountant or executive, the chapters which deal with the personnel department, scheduling and production, and prediction and trend will be of special interest.

With the usefulness of charts established beyond question, it only remains for each business concern to select those which are of value to it and have them constructed in the most accurate and convenient way.

Course on Cost Finding for Printers

TORONTO Typothetae has arranged a course in cost finding and accounting, to be held this season. It is limited to members of Toronto Typothetae or employees of member firms, because everything in connection with the course has been provided through Typothetae channels, and therefore the benefits are intended to accrue to members of the Association.

NEW MEMBERS

NEW MEMBERS

The following are new members of the Society:

Toronto Chapter

Leslie, J. R., Lincoln Pulp & Paper Co., Ltd., Merritton, Ont.
Ashmore, M. L., Clarkson, Gordon, Dilworth, Guilfoyle & Nash,
Toronto.

Montreal Chapter

Ellis, Frank G., Ellis & King, Montreal.
Austin, Noel A., the Miner Rubber Co., Ltd., Granby, Que.
Gates, Frank E. H., P. S. Ross & Sons, Montreal.
Hubert, P. J., J. W. Harris Manufacturing Co., Ltd., Montreal.
Masse, J. H., La Banque Canadienne Nationale, Montreal.
*Darrell, P. C., 1465 MacKay St., Montreal.
Lanthier, Aurele, The Rolland Paper Co., Ltd., Montreal.
*Thibault, The Rolland Paper Co., Ltd., Montreal.
*Rolland, Jean Paul, The Rolland Paper Co., Ltd., Montreal.

Hamilton Chapter

*Stoneman, A., Otis-Fensom Company, Ltd., Hamilton.
Gallagher, E. C., Sawyer-Massey, Ltd., Hamilton.
Bates, S. R., 1338 Cannon St., Hamilton.

Winnipeg Chapter

Pildrem, A. S., Canada Bread Co., Ltd., Winnipeg.
Hancox, L. J., R. J. Whitla & Co., Ltd., Winnipeg.
Sims, R. H., Globe Bedding Co., Ltd., Winnipeg.
Brandy, Jas. H., Northland Knitting Co., Ltd., Winnipeg.
*Stephenson, D. J., Northland Knitting Co., Ltd., Winnipeg.
*Amey, W. E., Northland Knitting Co., Ltd., Winnipeg.
Angus, W. C., Success Business College, Winnipeg.
Wilcox, H. B., Beaver Soap & Chemicals, Ltd., Winnipeg.
*Atkinson, R. N., Beaver Soap & Chemicals, Ltd., Winnipeg.
Beaufoy, S. J., Riddell, Stead, Graham & Hutchison, Winnipeg.
(Wrongly printed Blanfoy in last issue.)

Calgary

Howard, H. E., Grain Exchange Bldg., Calgary.

Saskatoon

Masecar, B. R., C.A., Royal Bank Bldg., Saskatoon.

Moncton

Dowell, C. H., Fraser Floral Co., Ltd., Moncton.

*Junior member.

Chapter Notes

TORONTO

While we do not happen to have the official returns before us, the gathering which greeted Harvey Guilfoyle on November 7th looked big enough to break preceding records of Toronto Chapter. The subject was "Interpretation of Business Statements." Mr. Guilfoyle was down on last year's programme to speak along this line, but with skill that suggested that he was something of a diplomat as well as a chartered accountant, he succeeded in hedging out of the job at that time. Possibly the big crowd at this meeting came to see that there was no postponement this time, and they were met by such a broadside of ideas as to show clearly that Mr. Guilfoyle had made good use of the interval. His address had evidently developed at compound

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interest during the summer. He spoke from notes, but we sincerely hope that Mr. Guilfoyle will be able to fix up a copy of his address for publication.

On the 21st, our Chapter sat at the feet of A. E. Keen, C.A., of Hamilton, who by the extent of his research into the subject of "Distribution of Administrative and Selling Costs" showed that he had not taken lightly the task of appearing before Toronto's notables. Mr. Keen surveyed some conclusions that had been reached in studies of the subject, and added several points of his own. His address will be part of the valuable material published in Cost and Management, and two neighbouring Chapters like Toronto and Hamilton can very well follow this up by interchange of other speakers of note.

MONTRÉAL

Professor Herbert Tait, of McGill University, led the members of Montreal Chapter a few paces into the realms of mathematical formulae in his address on November 8th on "Some Aspects of the Mathematics of Depreciation."

Without stopping to recommend any particular definition for depreciation itself, Professor Tait began directly with his demonstration of a few of the methods of determining from the mathematical point of view the amount of the annual addition which should be made to the depreciation reserve. He mentioned those methods most commonly known and adopted:

- (a) Straight Line Method—the writing off of a constant portion over the life of the article.
- (b) The Constant Percentage of Book Value Method—with its deficiency where the scrap value is very small or nil, and the danger of writing off too small a percentage of the book value.
- (c) Method of Decrease in Value, based on the sum of years of age, broadly following the lines of "b," but with advantages of operation.
- (d) Sinking Fund Method—providing for replacement by the investing of a fixed sum annually in outside securities.
- (e) The Annuity Method—resembling "d," but accounting for interest on the original investment.
- (f) The Unit of Cost Method—with its advantages in comparing old and new machines, but with its many attendant complications.

A long and animated discussion followed, the balance of opinion favouring as most practical the Straight Line and Sinking Fund Methods.

An unusually large audience, among whom was noted Sir Charles Gordon, President of the Bank of Montreal, greeted F. G. Daniels, President and Managing Director of Dominion Textile Company, Limited, at the University of Montreal, on Thursday, the 22nd. His paper, "Costs in the Textile Industry," dealt generally with that system adopted by the Company of which he is the Executive head, dealing with the various processes in the manufacture of cotton yarns and cloth. The system of normal costs outlined, whose most important uses are as—(a) a guide for selling values, and (b) a comparison of actual results—is based on the cost per pound of the product under normal operating conditions. The final fabric cost includes—

- (1) Manufacturing cost, exclusive of cotton.
- (2) Replacement value of the cotton in the fabric.
- (3) Selling expenses, allowances and administrative charges.

In the distribution of the general operating expenses over the factory departments, the proper proportion is added to each machine

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in each machine unit, and in the result only the charges applicable to the machines actually used are taken into account. Mr. Daniels supplemented his address by the "premiere" of the newly completed film "Cotton"—in which was traced the various stages of production,—stretching from the gathering of the raw material by the Southern negroes, through the various processes of manufacturing, until its final release as gray cloth ready for distribution to the various classes of trade. Mr. Daniels stressed the necessity of studying costs from within the plant, in order to properly acquire a practical knowledge of processes and operations. He recommended also that our Society should work for the establishment of standard cost methods in this as well as in other industrial groups.

WINNIPEG

The first regular meeting of the season of Winnipeg Chapter took place on September 27th in the Hudson's Bay Company dining room, and the attendance was 57. The speaker of the evening was R. B. Graham, crown prosecutor, his subject being "The Unbalanced Scales of Justice"—an interesting phase of laws, both as it affected the accountant and otherwise. During the business session which followed W. J. Macdonald, vice-president of the Institute of Chartered Accountants of Manitoba, spoke of the interest and confidence of that body in the newly formed Chapter. He was followed by W. J. Mundell and G. A. Phare.

The Winnipeg Executive elected earlier in the year being only a temporary one, the Chapter then went into election for a permanent committee for the 1928-29 season. The following were elected:—Chairman, F. C. Gilbert, C.A., Gilbert & Laird; vice-chairman, W. J. Mundell, C.A., Ogilvie Flour Mills Company, Ltd.; secretary-treasurer, G. A. Phare, the Royal Crown Soaps, Ltd.; directors: W. J. Logan, Manitoba Bridge & Iron Works, Ltd.; H. J. Morden, C.A., Oscar Hudson & Company; A. F. Emery, Western King Manufacturing Company, Ltd.; O. H. Pollard, Saults & Pollard, Ltd.

The second regular meeting was held in the Hudson's Bay Company rooms on October 18th. Immediately after dinner the minutes of the preceding meeting were read and adopted and other business of the chapter discussed. The speaker of the evening was C. H. Dahl, Assistant General Manager in charge of operations of the Winnipeg Street Railway. His subject, which was illustrated by numerous lantern slides of charts, was "Street Railway Operating Costs." A vote of thanks was moved by Mr. W. J. Mundell. After the main speech the meeting was thrown open to general discussion, and the question was raised of the allocation of idle time wages of factory employees paid on a fixed weekly scale. This developed into a general and very interesting discussion, and the meeting was finally adjourned at 10.30 p.m.

The third meeting was held at the Mikado Tea Rooms on Monday, November 19th. Thirty-seven members and nine visitors were present. Immediately after the dinner, J. Sanford Evans spoke on "The Cost of Moving Canada's Wheat Crop," dealing in an interesting and non-technical manner with the operations of the railroads in moving the entire crop from producer to consumer. A number of questions were asked, and a vote of thanks was moved by John Parton. During the brief business session which followed the minutes of the preceding meeting were read, and on motion of Messrs. Aitken and Macdonald were approved. The second portion of the meeting consisted of a general discussion on "Overhead and Distribution," being opened with a paper by J. S. Anderson. This resulted in a general and quite inter-

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esting discussion on the many phases of overhead, particular attention being paid to the allocation and general handling of interest. The meeting adjourned at 10.30 p.m.

The rest of the program for the season is as follows:—

1928

Dec. 17th—"Air Service Costs," Mr. J. Hunter, Western Canada Airways.
 "Presentation of Costs to the Executive," Mr. G. A. Phare, the Royal Crown Soaps, Limited.

1929

Jan. 21st—"Wheat Pool Administration," Mr. E. B. Ramsay, Can. Co-Op. Wheat Producers, Ltd.
 "Bread Making Costs," Mr. A. S. Pildrem, Canada Bread Co., Ltd.

Feb. 18th—"The General Scope of Cost Accounting," Mr. J. G. Mundie, Riddell, Stead, Graham & Hutchison.
 "Packing House Costs," Mr. J. C. M. Ligertwood, Peat, Marwick, Mitchell & Co.

Mar. 18th—Annual meeting—"Recent Developments in Currency and Credit," Prof. A. B. Clark, University of Manitoba.
 "Value of a Bachelor of Commerce Course to Industrial Accountants," Mr. J. Parton, Geo. A. Touche & Co.

It is anticipated that during April an additional joint meeting with the Institute of Chartered Accountants will be held, to be addressed by Mr. C. S. Walters, Commissioner of Income Tax, Ottawa, In any event an April meeting is tentatively arranged for if necessary.

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